

WHAT IS CLAIMED IS:

1. A method of managing a diabetic condition comprising;
 - configuring a meter to calculate a correction bolus using a correction algorithm;
 - further configuring the meter to measure a concentration of an analyte in a material sample from a patient, said analyte being an indicator of a diabetic condition, a result of said measurement being a variable used in said correction algorithm;
 - providing a server in two-way communication with said meter;
 - configuring said server to store information received from said meter;
 - allowing a medical caregiver to access the server using a terminal in two-way communication with said server; and further allowing the medical caregiver to modify said correction algorithm via said terminal.
2. The method of Claim 1, wherein variables used by the correction algorithm to calculate the correction bolus comprise patient-affected variables, and caregiver-affected variables.
3. The method of Claim 2, wherein modifying said correction algorithm comprises at least one member of the group consisting of:
 - changing a value of a caregiver-affected variable;
 - changing a mathematical operator in said correction algorithm;
 - changing a time interval between prompts from the meter for measurements;and
 - requesting an additional measurement.
4. The method of Claim 2, wherein modifying said correction algorithm comprises changing a value of a caregiver-affected variable, said caregiver-affected variable being selected from the group consisting of a correction factor, a target analyte concentration.
5. The method of Claim 1, further comprising allowing the care giver to request additional action from the patient via the meter.
6. The method of Claim 5, wherein requesting additional action comprises requesting a measurement of a ketone body or requesting a measurement of HBA1C.

7. The method of Claim 2, wherein the patient-affected variables comprise one or more members of the group consisting of: a measured glucose concentration, a measured HBA1C concentration and a measured ketone concentration.

8. The method of Claim 2, wherein the caregiver-affected variables comprise one or more members of the group consisting of: a target glucose concentration, a correction factor, a time interval between measurements.

9. The method of Claim 1, wherein the meter is a handheld meter.

10. A method for communicating patient information to a caregiver for use in managing a diabetic condition of a patient, said method comprising:

- providing a meter configured to measure a concentration of an analyte and to at least temporarily store the results of said measuring;

- associating said meter with said patient;

- configuring said meter to communicate to said caregiver by presenting to said caregiver a choice of at least one diabetes-relevant datum for communication by said meter to said caregiver.

11. The method of Claim 10, wherein said at least one diabetes-relevant datum is a member of the group consisting of:

- an individual value of a concentration of an analyte relevant to said diabetic condition;

- trends in individual values of analyte concentrations;

- individual analyte concentration measurement results which lie outside of a pre-determined range of values;

- a correction bolus consumed by said patient.

12. The method of Claim 11, further comprising configuring said meter to receive a communication of a datum from said caregiver.

13. The method of Claim 12, wherein said datum communicated from said caregiver to said meter is at least one member of the group consisting of:

- a numerical value used by an algorithm to calculate a correction bolus;

- a request for an additional concentration measurement; and

- a request for a measurement of a secondary analyte.

14. A method for communicating patient information to a caregiver for use in managing a diabetic condition of a patient, said method comprising:

providing a server configured to communicate with at least one patient-specific meter;

presenting to said caregiver a choice of at least one diabetic-specific datum for communication from said patient-specific meter to said caregiver; and

implementing said choice via said server.

15. The method of Claim 14, wherein said implementing comprises configuring said meter to send said at least one diabetic-specific datum to said server, and configuring said server to send said at least one diabetic-specific datum directly to the caregiver.

16. The method of Claim 14, wherein said implementing comprises configuring said meter to send said at least one diabetic-specific datum directly to the caregiver.

17. A method of managing a diabetic condition by placing a medical caregiver in electronic communication with a diabetic patient via a communications network, the method comprising:

providing a server having storage and processing capabilities;

providing at least one patient-specific meter configured to measure a concentration in a diabetic patient of at least one analyte associated with diabetes, said meter being further configured to calculate a correction bolus based on said concentration of said at least one analyte;

providing a communication terminal for said caregiver;

communicating at least one datum relating to said diabetic condition from said meter to said caregiver;

communicating at least one datum relating to said correction bolus from said caregiver to said meter.

18. The method of Claim 17, wherein the terminal for said caregiver comprises a personal digital assistant running a software program configured to communicate with the meter.

19. The method of Claim 17, wherein the terminal for said caregiver comprises a desktop or laptop computer running a software program configured to communicate with the meter.

20. The method of Claim 17, wherein said at least one datum communicated from said caregiver to said meter comprises a variable used by said meter to calculate said correction bolus.

21. The method of Claim 17, further comprising a terminal for a secondary caregiver, and communicating at least one datum relating to said diabetic condition from said meter to said secondary caregiver.

22. The method of Claim 17, further comprising configuring the server to store data related to a diabetic condition.

23. The method of Claim 17, further comprising communicating a datum relating to a correction bolus from said meter to an insulin delivery device.

24. The method of Claim 23, wherein the insulin delivery device is an insulin delivery pen.

25. The method of Claim 24, further comprising providing a port on the meter, the port being configured to mechanically engage an insulin delivery pen to select an insulin dosage; and mechanically communicating a datum relating to a correction bolus from said meter to the insulin delivery pen via said port.

26. The method of Claim 25, further comprising configuring the port to mechanically engage a dosage selection knob of the pen and to rotate the knob a predetermined amount.

27. The method of Claim 17, further comprising providing an insulin delivery pen configured to communicate electronically with the meter, the pen comprising a micro-controller configured to make available a measured dosage of insulin for injection into a patient, and electronically communicating a datum relating to a correction bolus from said meter to the insulin delivery pen.

28. A system usable by a medical caregiver to manage a diabetic condition of a patient, said system comprising:

- a server containing a database of information associated with at least a first patient;

- a meter associated with said first patient, said meter being adapted to calculate a correction bolus using a correction algorithm and a plurality of patient-affected and caregiver-affected variables, said meter being in two-way communication with the server;

a terminal associated with the caregiver, the terminal being adapted to allow said caregiver to view at least a portion of said information associated with said first patient, the terminal being further adapted to allow the caregiver to modify the correction algorithm associated with the first patient.

29. The system of Claim 28, wherein the server is a portion of the meter.

30. The system of Claim 28, wherein the terminal is a desktop or laptop computer running a software program configured to communicate with the meter and the server.

31. The system of Claim 28, wherein the terminal is a desktop or laptop computer running a software program configured to communicate with the meter or the server.

32. The system of Claim 28, wherein the terminal is a hand-held personal digital assistant device running a software program configured to communicate with the meter and the server.

33. The system of Claim 28, wherein the terminal is a hand-held personal digital assistant device running a software program configured to communicate with the meter or the server.

34. The system of 28, wherein the caregiver-affected variables comprise:

a correction factor;

a target glucose level; and

a frequency of analyte measurements.

35. The system of Claim 28, wherein said meter is adapted to measure a concentration of an analyte associated with a diabetic condition.

36. The system of Claim 35, wherein the meter comprises a user interface adapted to display information to the patient.

37. The system of Claim 28, wherein the meter comprises a user interface adapted to receive input of parameters affecting glucose concentrations from the patient.

38. The system of Claim 28, wherein the meter is configured to communicate with an insulin-delivery device.

39. The system of Claim 38, wherein the meter comprises a port configured to mechanically engage an insulin delivery pen to select an insulin dosage.

40. The system of Claim 39, wherein the port is configured to mechanically engage a dosage selection knob of the pen and to rotate the knob a predetermined amount.

41. The system of Claim 40, wherein the predetermined amount is determined by the meter.

42. The system of Claim 38, further comprising an insulin delivery pen configured to communicate electronically with the meter, the pen comprising a micro-controller configured to make available a measured dosage of insulin for injection into a patient.

43. The system of Claim 28, wherein the server comprises databases of information associated with a plurality of patients.

44. The system of Claim 28, further comprising a plurality of meters associated with said first patient.

45. The system of Claim 28, further comprising a plurality of meters associated with a plurality of patients.

46. The system of Claim 28, further comprising a security system configured to prevent unauthorized access to patient-specific data in the system.

47. A system for managing a diabetic condition of a patient, the system comprising:
a handheld meter comprising a digital memory and computing abilities, the digital memory being programmed with a correction algorithm for calculating a correction bolus from a plurality of parameters;
a server in two-way communication with said meter;
wherein at least some of said parameters for calculating said correction bolus are stored in and updatable by said server;
wherein the server is configured to allow a care giver to remotely modify at least one of said parameters for calculating a correction bolus.

48. The system of Claim 47, wherein the server is a personal computer.

49. The system of Claim 47, wherein the server is a handheld personal digital assistant.

50. The system of Claim 47, wherein the server is a portion of the handheld meter.

51. The system of Claim 47, wherein the meter is further adapted to measure a concentration of an analyte related to a diabetic condition in said patient.

52. The system of Claim 51, wherein said concentration of said analyte is one of said parameters for calculating a correction bolus.

53. The system of Claim 52, wherein one possible correction bolus is a dosage of insulin.

54. The system of Claim 47, further comprising a security system configured to prevent unauthorized access to patient-specific data in the system.